AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended)   A communication service system based on an open Application Programming Interface (API) for disabled persons, comprising:

a terminal unit implemented for a disabled person and a non-disabled person that access a wired/wireless integrated network and desire to be provided with communication services depending on communication characteristics registered with respect to the disabled person and the non-disabled person;

an open API gateway unit for providing an open API communication interface for the wired/wireless integrated network;

an open API unit for grasping communication characteristics of the terminal unit and accommodating a plurality of application functions for the communication services provided to the terminal unit;

an open API communication server unit for registering the communication characteristics of the terminal unit and providing voice and/or text communication services for the disabled person depending on the registered communication characteristics of the terminal unit; and

a voice and text conversion unit for converting data received from the open API communication server unit into voice and/or text having a format of requested service data depending on the characteristics of the disabled person, and returning the voice and/or text to the open API communication server unit,
wherein the open API communication interface operates to allow existing and third party application services to access the wired/wireless integrated network independently from characteristics of the wired/wireless integrated network.

Claim 2 (Original)   The communication service system according to claim 1, wherein the terminal unit has user interfaces with communication characteristics for the communication services which can be used by a non-disabled person, an auditorily disabled person, a visually disabled person, and a speed disabled person, respectively.

Claim 3 (Original)　　The communication service system according to claim 2, wherein the non-disabled person has communication characteristics of hearing, speaking, reading and writing that are used as an interface, the visually disabled person has communication characteristics of hearing, speaking and writing that are used as an interface, the auditorily disabled person has communication characteristics of speaking, reading and writing that are used as an interface, and the speech disabled person has communication characteristics of hearing, reading and writing that are used as an interface.

Claim 4 (Original)　　The communication service system according to claim 1, wherein the open API gateway unit supports protocols, such as Session Initiation Protocol (SIP), Media Gateway Control (MAGACO) protocol, H. 323 protocol, Integrated Services Digital Network (ISDN) User Part (ISUP), Mobile Application Protocol (MAP), Intelligent Network Application Protocol (INAP), and Capabilities Application Protocol (CAP), which are used in the wired/wireless integrated network, and exploits middleware, such as Common Object Request Broker Architecture (CORBA) and Extensible Markup Language (XML) so as to communicate with the open API communication server.

Claim 5 (Original)　　The communication service system according to claim 1, wherein the open API unit comprises:

a framework unit for performing a plurality of functions including access to the communication services, registration, authentication and discovery of the communication services, integrity management, load management, and fault management; and

a service capability feature unit for providing a plurality of functions, including call control, messaging, user interaction, terminal capabilities, mobility, connectivity, presence and availability, and service routing, so as to allow application services to use resources and functions of the network.

Claim 6 (Original)　　The communication service system according to claim 1, wherein the open API communication server unit is operated so that, if a connection request is received from a specific user terminal to use a corresponding communication service, the server unit

routes the communication service to the voice and text conversion unit when voice and/or text conversion is required in consideration of communication characteristics of transmitting and receiving user terminals, and provides a communication service corresponding to voice and/or text returned from the voice and text conversion unit.

Claim 7 (Original)   The communication service system according to claim 1 or 6, wherein the open API communication server unit comprises:

a communication service unit for providing the communication service in consideration of communication characteristics between terminals of disabled persons and between terminals of a non-disabled person and a disabled person;

a registration unit for registering characteristics of the respective terminals when the terminals use the communication service first time;

a connection unit for supporting an interface with the wired/wireless integrated network and setting up a call in response to a communication service request received from the user;

a service routing unit for routing a corresponding communication service to support conversion into voice and/or text data in consideration of the characteristics of the respective terminals at the time of providing the communication service; and

an open API unit for providing API to allow a higher application to use the resources of the network.

Claim 8 (Currently Amended)   A method of providing communication services based on an open Application Programming Interface (API) for disabled persons, comprising the steps of:

a) registering communication characteristics of terminals of a disabled person and a non-disabled person, desiring to be provided with a corresponding open API communication service in an open API communication server;

b) requesting the open API communication server to establish communication with a terminal of an opposite user desiring to use the communication service, using the registered terminal;

c) the open API communication server grasping communication characteristics of the terminals of the transmitting user and the opposite user, informing the transmitting user terminal that the communication service is available, and determining whether voice and/or text conversion for the communication service is required when a message is received from the transmitting user terminal;

d) converting the message into voice/text data depending on the communication characteristics of the opposite user terminal by a voice and text conversion center and providing the communication service using the voice/text, when the voice and/or text conversion is required; and

e) providing the communication service using the message when the voice and/or text conversion is not required,
wherein the open API communication service operates to allow existing and third party application services to access a network, that the terminals communicate with, independently from characteristics of the network.

Claim 9 (Original) The communication service method according to claim 8, wherein the communication characteristics of the terminals include hearing, speaking, reading and writing communication characteristics.

Claim 10 (Original) The communication service method according to claim 8, further comprising the step of setting up a call from the transmitting user terminal to the opposite user terminal in response to the communication establishment request at step b).

Claim 11 (Original) The communication service method according to claim 8, wherein the step d) comprises the steps of:
the open API communication server routing the message to the voice and text conversion center so as to perform voice/text conversion in consideration of the communication characteristics of the respective terminals;

the voice and text conversion center converting the message into voice and/or text depending on the communication characteristics of the opposite user terminal and returning the voice and/or text to the open API communication server; and

the open API communication server transmitting the voice and/or text returned from the voice and text conversion center to the opposite user terminal, thus providing the communication service.